

S/179/62/000/001/021/027
E073/E535

18.8200

AUTHOR: Voloshenko-Klimovitskiy, Yu.Ya. (Moscow)
TITLE: On the relations governing changes of the yield point
at high loading rates and low temperatures

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye
tekhnicheskikh nauk. Mekhanika i mashinostroyeniye,
no.1, 1962, 154-156

TEXT: The results are described of direct measurements of
the yield point of steels 3 and 45, Armco iron and the aluminium
alloys D-16 (D-16) and AMG-6T (AMG-6T) during static, "high"
(intermediate) speed and impact loading at specimen temperatures
varying between +20°C and -196°C. The impact speed equalled
6 m/sec for the aluminium alloys and 3.6 m/sec for the other
materials. It was found that for AMG-6T, D-16 and Steel 45 the
dependence of the yield point on temperature under impact loading
can be obtained by shifting upward the curve pertaining to static
loading. Thus, the increase in the yield point under the combined
action of low temperature and high-speed loading is equal to the
sum of increments caused by the individual factors and not to the
Card 1/2

✓B

On the relations governing ...

S/179/62/000/001/021/027
E073/E535

product. For Armco iron and Steel 3 a new phenomenon was observed: between -145 and -196°C an increase in the loading rate from medium to high has no effect on the magnitude of the yield point. This is attributed to an abrupt change in the mechanism of plastic deformation at certain temperature and loading conditions. The order of sensitivity of the investigated materials to the loading rate is as follows: aluminium alloys AMG-6T and D-16, Steels 3, 45 and Armco iron. There is 1 figure. ✓B

SUBMITTED: May 22, 1961

Card 2/2

KUDIN, Sergey Nikolayevich [Kudin, S.M.]; PODGORINOV, Anatoliy Leonidovich
[Podhorinov, A.L.]; KHILOBOCHENKO, Leonid Samsonovich;
POLTORATSKAYA, Ye. [Poltorats'ka, E.], red.; VOLOSHCHENKO, Z., red.;
NARINSKAYA, A. [Narins'ka, A.], tekhn.red.

[Small hydroelectric power stations of the Ukrainian S.S.R.] Mali
hidroelektrostantsii URSR. Kyiv, Derzh.vyd-vo lit-ry i budivnytstva
i arkhitekt. URSR, 1960. 158 p. (MIRA 14:3)
(Ukraine--Hydroelectric power stations)

VOLOSHENKO, N.N., inzh.; ISHCHEENKO, I.M., kand.tekhn.nauk

Determining the elastic and viscous characteristics of
cohesive soils. Avt.dor.i dor.stroi. no.1:61-68 '65.
(MIRA 18:11)

AID Nr. 989-8 13 June VOLOSHIKOV, V. V.

ARGON-SHIELDED PULSED-ARC WELDER (USSR)

Stolbov, Yu. I., and V. V. Voloshikov-- Svarochnoye proizvodstvo, no. 4,
Apr 1963, 36-38. S/135/E3/000/004/011/012

A pulsed-arc welder for a fixed-position automatic TIG welding of stainless steel tubes 6 to 30 mm in diameter has been built in a plant [unidentified] after conventional TIG welding and TIG welding with a magnetically rotated arc failed to produce satisfactory results. In the new welder, a modified BCC-120 welding rectifier, each phase of the primary is provided with a 100-ohm shunting resistor. An automatically controlled magnetic switch periodically connects and disconnects the phases of the primary, changing the power supplied to the arc from full to just sufficient to maintain a small "pilot" arc. The voltage and current of the welding and pilot arcs and the

Card 1/2

AID Nr. 989-8 13 June

ARGON-SHIELDED PULSED-ARC WELDER [Cont'd]

S/135/63/000/004/011/012

pulse duration are selected according to the wall thickness of the tube. For instance, tubes with a wall thickness of 1 mm are welded with welding- and pilot-arc voltages of 12-14 and 10-12 v, currents of 40-45 and 12-15 amp, and burning times of 0.17-0.20 and 0.22-0.25 sec, respectively. The welds have uniform shape, penetration, and quality regardless of the position of the weld.

[DV]

Card 2/2

VOLOSHIN, A., starshiy shturman

Passenger traffic in the Caspian Basin. Mor. flot
22 no.11:5 N '62. (MIRA 15:12)

1. Teplokhod "Kirgizstan".
(Caspian Sea—Merchant marine—Passenger traffic)

VINOGRADOV, A.; GAPONOV, V.; VOLOSHIN, A., inzh.; PUSHKIN, D., instruktor;
IGNATENKO, N.; IVANOV, A.; MALANCHENKO, I.; BUBLEY, Ye.; SHABAD, M.

Readers' letters. NTO 3 no.8:54-55 Ag '61. (MIRA 14:9)

1. Chlen byuro avtodorozhnoy seksii Leningradskogo oblastnogo pravleniya Nauchno-tekhnicheskogo obshchestva gorodskogo khozyaystva i avtotransporta (for Gaponov). 2. TSentral'noye pravleniye Nauchno-tekhnicheskogo obshchestva mukomol'noy i krupyanoy promyshlennosti i elevatornogo khozyaystva (for Pushkin). 3. Predsedatel' Belgorodskogo oblastnogo pravleniya Nauchno-tekhnicheskogo obshchestva pishchevoy promyshlennosti (for Ignatenko). 4. Predsedatel' soveta pervichnoy organizatsii Nauchno-tekhnicheskogo obshchestva "Len-energo" (for Shabad).

(Technological innovations)

VOLOSHIN, A.A., kand.tekhn.nauk

Secondary stresses from internal pressure in flanges of containers.
Khim. i neft. mashinostr. no.1:11-13 Ja '65.

(MIRA 18:3)

VOLOSHIN, A.A., kand.tekhn.nauk

A new solution of the problem on the conjunction of a plate and
shell having variable wall thickness. Vest.mashinostr. 45
no.3:16-19 Mr '65. (MIRA 18:4)

VOLOSHIN, A.A., kand.tekhn.nauk

Design of pipelines with consideration of external loads.
Energomashinostroenie. 11 no.2:42 F '65.

(MIRA 18:4)

VOLOSHIN
VOLOSHIN, A.A., kand. tekhn. nauk.

Calculating pipelines with expansion pieces. Sudostroenie 22 [i.e. 23]
no. 10:60-62 0 '57. (MIRA 11:2)

(Marine pipe fitting)

VOLOSHIN, A.A., kand. tekhn. nauk.

Flexibility and strength of lens-shaped expansion pieces in pipelines.
Vest. mash. 38 no.4:12-16 Ap '58. (MIRA 11:3)
(Pipe fitting)

VOLOSHIN, A.A., kand.tekhn.nauk

External load calculation of piping. *Energomashinostroenie* 4
no.3:10-14 Mr '58. (MIRA 11:5)
(Pipe) (Strains and stresses)

VOLOSHIN, A A.
VOLOSHIN, inzh.

Activity of the Scientific and Technical Division of the Estonian
Republic shipbuilding industry. Sudostroenie 23 no.9:66 S '57.
(MIRA 10:12)

(Estonia--Shipbuilding)

VOLOSHIN, A. A., kand.tekhn.nauk

Special features in the structural calculation of steampipes
made of austenitic steel. Energomashinostroenie 6 no.5:6-10
My '60. (MIRA 13:9)

(Steampipes)

(Austenite)

VOLOSHIN, Andrey Andreyevich; OBRAZTSOV, B.M., nauchnyy red.; NIKITINA,
R.D., red.; LEVOCHINA, L.I., tekhn.red.

[Design of flange unions for pipes and vessels] Raschet
flantsyvykh soedinenii truboprovodov i sosudov. Leningrad,
Gos.soiuznoe izd-vo sudostroitel'.promyshl., 1959. 290 p. (MIRA 12:5)
(Flanges)

~~VOLOSHIN~~ A.A., inzh.

Activity of the Scientific and Technical Division of the
shipbuilding industry of the Estonian Republic. Sudostroenie
24 no.1:79 Ja '58. (MIRA 11:2)
(Estonia---Shipbuilding)

VOLOSHIN, A. A.
USSR/ Engineering

Card 1/1 Pub. 128 - 4/25

Authors : Voloshin, A. A., Cand. Techn. So.

Title : Compactness of flange joints under the effect of bending moments

Periodical : Vest. mash. 35/4, 13-18, Apr 1955

Abstract : The theoretical bases of a method for the calculation of the effect of external forces (bending moments) on the compactness (density) of flange joints are analyzed. Some results obtained by the new mathematical method are listed. It is stated that the application of this method during the planning of flange joints and pipe lines would guarantee the required density of the joints. The method also makes it possible to estimate the magnitude of the external force affecting the bolts of flange joints and to recommend such pipe contours in which the bending moment will not exceed the permissible one. Five references: 4 USSR and 1 USA (1947-1953). Tables; drawings.

Institution :

Submitted :

VOLOSHIN, A.A., kand.tekhn.nauk

Calculation of stresses in welds between steel pipes with
various coefficients of linear expansion. Sudostroenie 27
no.6:33-36 Je '61. (MIRA 14r6)

(Thermal stresses)
(Marine pipe fitting)

VOLOSHIN, A.A., kand.tekhn.nauk

Stresses in a multilayer lense for compensators of high-pressure
pipings. Vest.mashinostr. 43 no.8:39-42 Ag '63. (MIRA 16:9)
(Membranes (Technology))


S/123/61/000/020/032/035
A004/A101

AUTHOR: Voloshin, A. A.

TITLE: On the calculation of stresses in weld seams between steel pipes
with different coefficients of linear expansion

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 20, 1961, 41, abstract
201238 ("Sudostroyeniye", 1961, no. 6, 33-36)

TEXT: The author gives an account of a method of calculating heat stresses arising during welding. He analyzes the methods of determining the stresses which are broken down into 5 groups. Stresses of the 1st group are heat stresses originating during the deformation of bending the edges of the joined pipes. The author derives calculation dependences to determine the stresses in thin-walled pipes. With practically admissible errors these dependences can be also extended to thick-walled pipes. It is pointed out that annular tensile stresses will arise in the outer parts of the pipes with the lower coefficient of linear expansion, while these stresses are of the compressive type in the pipe ends with the greater coefficient of linear expansion. The stresses of the 2nd group are heat stresses acting in the butt plane of the pipe and arise owing to the



Card 1/3

S/123/61/000/020/032/035

A004/A101

On the calculation of stresses ...

difference in the coefficient of linear expansion of the pipe material. The author presents a formula to determine these stresses and points out that in the pipe ends with the lower coefficient of linear expansion these stresses are of the tensile type while in the other pipe end they are of the compressive type. The stresses of the 3rd group are residual stresses, acting in the butt plane of the pipe and arise owing to the difference in the coefficient of linear expansion of the pipe material. According to test data, the annular residual stresses change discontinuously the sign after the heat treatment of the seam over the fusion cross section. To the right and left of this cross section they possess an extreme magnitude which can be taken as equal to the yield point of the material of the solid pipe at 20°C. In the pipe ends with the lower coefficient of linear expansion these stresses are of the compressive type, while tensile stresses occur in the pipe ends with the higher coefficient of linear expansion. The 4th group comprises stresses from internal pressure, bending stresses and torsional stresses which arise in the pipeline, as in a statically indeterminate system, during its thermal expansion. These stresses are determined according to the known formulae for longitudinal and annular stresses in the walls of thin-walled vessels under internal pressure. The stresses of the 5th group are thermal stresses originating in double-layer pipes as a result of the

Card 2/3

S/123/61/000/020/032/035
A004/A101

On the calculation of stresses ...

difference in the coefficient of linear expansion of the layer materials. The most simple way to calculate these stresses is to assume that both pipe layers are equally thick. In such a case it is possible to assume with admissible accuracy that the tensile stresses in the outer pipe are equal to zero. The compressive stresses in the inner pipe are determined by a formula being presented. The weld seams of pipes from different steels mean essentially pipes of unequal strength. Therefore, in designing ship's steam pipelines, detachable unions with flanges from different steels and elastic helically wound packings are used which dependably operate at relative radial displacements of the sealing surfaces of the flanges. A calculation example is given. There are 2 figures and 9 references.

N. Alekseyev

[Abstracter's note: Complete translation]

Card 3/3

VOLOSHIN, A.A.

SKVORTSOV, A.A., kandidat tekhnicheskikh nauk.

"Calculating thermal expansion of steam pipes." A.A.Voloshin.
Reviewed by A.A.Skvortsov. Elek.sta. 25 no.9:62-64 8-54. (MIA 7:9)
(Steampipes) (Voloshin, A.A.)

VOLOSHIN, A.A., kand. tekhn. nauk

Method for considering flexure stresses caused by internal
pressure in the walls of pipes. Energomashinostroenie 9
no.3:25,28 Mr'63. (MIRA 17:5)

VCLCSHIN, A. A.

Raschet paroprovodov na teplovye rasshireniia [Steam-pipe calculations for heat expansion]. Leningrad, Sudpromgiz, 1953. 204 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 8 November 1953

VOLOSHIN, A.A.

[Calculation of the heat expansion of steam pipework] Raschet
paroprovodov na teplovye rasshireniia. [Leningrad] Gos.izd-vo
sudostroitel'nykh, 1953. 203 p. (MLRA 7:2)
(Marine pipe fitting) (Steampipes)

VOLOSIN, A.A., inzh.

Activity of the Estonian Republic Administration of the Scientific
and Engineering Society of the Shipbuilding Industry during 1958.
Sudestreenie 25 no.4:74 Ap '59. (MIRA 12:6)
(Estonia--Shipbuilding)

25(2)

PHASE I BOOK EXPLOITATION

SOV/2631

Voloshin, Andrey Andreyevich

Raschet flantsevykh soyedineniy truboprovodov i sosudov (Design of Flange Joints for Pipelines and Containers) Leningrad, Sudpromgiz, 1959. 290 p. 3,000 copies printed.

Scientific Ed.: B.M. Obratsov; Ed.: R.D. Nikitina; Tech. Ed.: L.I. Levochkina.

PURPOSE: This book is intended for designers and technical personnel in the shipbuilding industry and students of shipbuilding vtuzes.

COVERAGE: The author discusses the design of flanged joints for pipings and tanks in accordance with the requirements of a modern ship power plant. The methods discussed permit determination of the loading of a flanged joint under ultimate critical operational conditions, and the design for strength of its elements based on their load-carrying capacity. No personalities are men-

Card 1/6

Design (Cont.)

SOV/2631

tioned. There are 29 references; 21 Soviet, 6 English, and 2 German.

TABLE OF CONTENTS:

Preface	3
Basic Symbols	5
Ch. I. Basic Problems of Designing Flanged Joints	7
1. Constructions of flanged joints	7
2. The problem of designing flanged joints	9
3. Carrying capacity of plastic flanges	17
4. Carrying capacity of flanges made of brittle materials	23
5. Design stresses	24
Ch. II. Basic Methods of Designing Flanges	25
6. Waters' method and other methods	25
7. Professor Siefel's method	32

Card 2/6

Design (Cont.)

SOV/2631

8. Method of design according to limit loads	35
Ch. III. Packings	
9. Seals and packing surfaces	37
10. Rubber gaskets	38
11. Plastic gaskets	41
12. Asbestos gaskets	48
13. Metallic gaskets	51
14. Cellulose, fiber, cork, and leather gaskets	55
15. Designing gaskets for thrust caused by hydrostatic pressure	69
16. Sealing compounds	71
17. General instructions for use of gaskets and for insuring tightness of the joint seal	73
	75
Ch. IV. Design of Flanges for Bolt Loading	
18. Forces acting on flanges	78
19. The basic system and the basic design equations	78
20. Design of flange rings	83
21. Design of flange hubs	83
	100

Card 3/6

Design (Cont.)

Sov/2631

22.	State of stress in the conjugate area between the hub and the flange ring	127
23.	Basic calculating expressions for integral and companion flanges	138
24.	Safety factor	144
Ch. V.	Determining Bolt Loads	
25.	Bolt load and forces acting on flanges	149
26.	Part of load required for tightening the seal	149
27.	Additional load on bolts required for tightening the seal in elastic deformation of sealing surfaces	150
28.	Determination of the Q- part of the load	152
29.	Determination of the supplementary operational load AQ	163
Ch. VI.	Effect of External Loads on Flanged Joints	
30.	Effect of internal pressure	164
31.	Effect of bending moment	164
32.	Effect of torque	171
33.	Flanged joints [with tightness] "equal to strength" of pipe and fundamentals of their design	177

Card 4/6

Design (Cont.)

SOV/2631

34. Strength of flanged joints under varying load	180
Ch. VII. Designing and Calculating a Flanged Joint Taking Into Account the Temperature of Its Parts	
35. Temperatures of flanged joint parts and determination of supplementary load on bolts	184
36. Tightness of joints in a sudden change of temperature of the working medium, and recommendations for design	185
37. Design of flanged joints for creep and relaxation	188
Ch. VIII. Designing Bolts	193
38. General principles	199
39. Designing lightly loaded bolts	199
40. Designing critical bolts	200
41. Basic information on design and use of bolts. Methods of tightening bolts	200
Ch. IX. Design of Flanges for Internal Pressure and Some Other Design Cases	203
	208

Card 5/6

Design (Cont.)

SOV/2631

42. Designing integral flanges for internal hydrostatic pressure	208
43. Designing companion flanges	213
44. Designing integral flanges for elasto-plastic state	216
45. Designing blind flanges	217
Ch. X. Sequence of Design of Flanges	226
46. Basic instructions for designing flange joints for strength and tightness	226
47. Examples of design	228
Appendixes	253
Bibliography	288

AVAILABLE: Library of Congress (TA 492.F5V6)

Card 6/6

GO/jb
11-27-59

BYSTREVSKIY, L.M., inzh.; KOLOSOVSKAYA, T.S., inzh.; VOLOSHIN, A.A., inzh.

Conference on problems of expanding welding practices. Sudostroenie
28 no.8:61-62 Ag '62. (MIRA 15:8)

1. Chlen Nikolayevskogo oblastnogo pravleniya Nauchno-tekhnicheskogo obshchestva sudostroitel'noy promyshlennosti (for Bystrevskiy).
2. Uchenyy sekretar' Estonskogo respublikanskogo soveta nauchno-tekhnicheskikh obshchestv (for Voloshin).
(Ship-Welding)

VOLOSHIN, A.A., kand.tekhn.nauk

Design of steam pipelines with bellows-type packless expansion
joint without braces. Sudostroenie 26 no.8:34-37 Ag '60.
(MIRA 13:10)

(Marine pipe fitting)

VOLOSHIN, A. I.

USSR/Engineering
Temperature - Measurements
Coke Ovens

Dec 1947

"Measurement of the Temperature in the Area under the Crown of Coke Ovens," B. I. Kustov, A. I. Voloshin, I. A. Kopeliovich, Ukrainian Coal Chemical Institute, 4 pp

"Zavodskaya Laboratoriya" Vol XIII, No 12

Three questions are considered: 1) How are temperatures distributed along the length of the area under a furnace crown and which point must be taken as a combined determinate? 2) Is the final or average temperature for the coking period to be taken as an indicator of the degree of heating of the area under the crown? 3) What is the influence of the radiation of the crown and in measuring the temperature of the area under the crown by ordinary thermocouples for determining the actual temperature of the gas mixture, must a correction be introduced because of its influence?

Pa 36^T18

VOLOSHIN A. I.

Voloshin A. I. - "Certain temperature and heat correlations in coke ovens," Authors: I. A. Kopeliovich, B. I. Kustov, A. I. Voloshin and A. F. Beletskaya. Trudy Ukr. nauch.-issled. uglekhir. inta, Issue 2, 1948, p. 67-75

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

ca

21

Drawing off gas from coking chambers. B. I. Kustov and A. I. Voloshin. *Stal* 8, 6-10(1948).—Expts. are reported on the performance of by-product ovens with one and two gas-collecting pipes. When one of the collecting pipes was shut off, the temp. under the oven crown rose; this caused gas pyrolysis and deposition of graphite. The quality of the tar, benzene, and gas was thereby lowered. The use of one collecting pipe also makes work conditions harder. With 2 collecting pipes, the yield of gas (4000 kcal./cu. m.) rose from 299 to 314 cu. m./ton, and the quality of coke was not affected. M. Hirsch

Temperature conditions during the use of brick in coking chambers. B. I. KUSHNIV AND A. I. VIKHARIN. *Ognesovoy*, 13 [2] 75-81 (1948) - A reliable method was developed for measuring the temperatures on the surface of wall brick in coking chambers with the aid of surface thermocouples of special construction (method not described). Measurements were taken in Bekker and Giprokoks (Russian design) coke ovens having coking periods of 16 and 18 hr., respectively, and temperatures of 1330° to 1340°C. in the system. After the chamber is charged with coal, the temperature on the wall surface drops to 800° to 600° during the first 2 to 2.5 hr. of coking. Then there is a sharp rise followed by a gradual rise in temperature. The rate of cooling during the first hour of coking is about 300° to 350° per hr. and during the second hour, 90° to 100° per hr. The rate of increase in the remaining period of coking was not over 50° to 60° per hr. The coefficient of heat transfer and the heat conductivity of the walls are calculated. Dynamics of temperature variations are of practical interest in understanding the process of the destruction of Dinas brick in coking chambers. H Z K.

PROCESSING AND PROPERTIES INDEX									
111 AND 112 SERIES					120 AND 110 SERIES				
5					3				
<p>DETERMINATION OF THE WALL-SURFACE TEMPERATURE OF THE CHAMBERS OF COKE OVENS AND THE CHARACTERISTICS OF THE HEAT-FLOW OF THE CHARGE. B. I. Rustov and A. I. Veloskin. (Zavodskaya laboratoriya, 1948, vol. 14, Apr., pp. 441-445). (In Russian). An account is given of an investigation, carried out at the Kharkov Experimental Coking Plant, of the thermal conditions in well-regulated Becker and Giprekoks ovens. These ovens were coking a charge with a moisture content of 8-9% in 16-18 hr, a temperature of 1330-1340° C being maintained in the heating flues. A special device was used for the measurement of the surface temperature of the chamber walls, consisting of a suitably insulated steel plate carrying an iron-constantan thermocouple which could be lowered through the charging hole and pressed tightly against the wall. The plate was fixed to a long iron tube in which the thermocouple leads were also situated. In addition to the wall temperature, the temperature of the centres of the charge and the wall of the heating flue were continuously recorded. The results obtained are presented and are used, in conjunction with a partial heat balance, for the</p>									
<p>ASH-11A METALLURGICAL LITERATURE CLASSIFICATION</p>									
<p>FROM SYNONYM</p>									
<p>TO SYNONYM</p>									

calculation of the thermal flow through the wall and the charge.
The value for the thermal conductivity of dinas brick obtained
in these calculations is in good agreement with values determined
in laboratory experiments.-S.K.

VODNEV, G.G.; SHELKOV, A.K.; DIDENKO, V.Ye.; FILIPPOV, B.S.; TSAREV, M.N.;
ZASHVARA, V.G.; LITVINENKO, M.S.; MEDVEDEV, K.P.; MOLODTSCV, I.G.;
LGALOV, K.I.; RUBIN, P.G.; SAPOZHNIKOV, L.M.; TYUTYUNNIKOV, G.N.;
DMITRIYEV, M.M.; LEYTES, V.A.; LERNER, B.Z.; MEDVEDEV, S.M.; REVIYAKIN,
A.A.; TAYCHER, M.M.; TSOGLIN, M.E.; DVORIN, S.S.; RAK, A.I.; OBUKHOV-
SKIY, Ya.M.; KOTKIN, A.M.; ARONOV, S.G.; ~~VOLOSHIN, A.I.~~; VIROZUR, Ye.V.;
SHVARTS, S.A.; GINSBURG, Ya.Ye.; KOLYANDR, L.Ya.; BELETSKAYA, A.F.;
KUSHNEREVICH, N.R.; BRODOVICH, A.I.; NOSALEVICH, I.M.; SHTROMBERG, B.I.;
MIROSHNICHENKO, A.M.; KOPELIOVICH, V.M.; TOPORKOV, V.Ya.; AFONIN, K.B.;
GOFTMAN, M.V.; SEMENENKO, D.P.; IVANOV, Ye.B.; PEYSAKHZON, I.B.;
KULAKOV, N.K.; IZRAELIT, E.M.; KVASHA, A.S.; KAPTAN, S.I.; CHERMNYKH,
M.S.; SHAPIRO, A.I.; KHALABUZAR', G.S.; SEKT, P.Ye.; GABAY, L.I.;
SMUL'SON, A.S.

Boris Iosifovich Kustov; obituary. Koks i khim. no.2:64 '55.(MLRA 9:3)
(Kustov, Boris Iosifovich, 1910-1955)

ARONOV, Samuil Grigor'yevich; BAUTIN, Ivan Grigor'yevich; VOLKOVA, Zoya Andreyevna; VOLOSHIN, Arkhip Il'ich; VIROZUB, Yevgeniy Vladimirovich; QABAY, Lev Izrailevich, DIDENKO, Viktor Yefimovich; ZASHKVARA, Vasil'y Grigor'yevich; IVANOV, Pavel Aleksandrovich, KUSTOV, Boris Iosifovich [deceased]; KOTOV, Ivan Konstantinovich; KOTKIN, Aleksandr Matveevich; KOMANOVSKIY, Maksim Semenovich; LBYTES, Viktor Abramovich, MOROZ, Mikhail Yakovlevich; NIKOLAYEV, Dmitriy Dmitriyevich. OBUKHOVSKIY Yakov Mironovich; RODSHTEYN, Pavel Moiseyevich; SAPOZHNIKOV, Yakov Yudovich, SENICHENKO, Sergey Yefimovich; TOPORKOV, Vasil'y Yakovlevich; CHERMONYKH Mikhail Sergoyevich; CHERKASSKAYA, Esfir' Ionovna, SHVARTS, Semen Aronovich; SHERMAN, Mikhail Yakovlevich; SHVARTS, Grigoriy Aleksandrovich; LIBERMAN, S.S., redaktor izdatel'stva; ANDREYEV, S.P., tekhnicheskij redaktor

[Producing blast furnace coke of uniform quality; a collection of articles for the dissemination of advanced practices] Poluchenie domennogo koksa postoiannogo kachestva; sbornik statei po obmenu peredovym opytom. Khar'kov, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1956. 300 p. (MLRA 9:8)
(Coke industry)

VIROZUB, I.V.; VOLOSHIN, A.I.; LGALOV, K.I.

Heat expended for coking. Koks i khim. no.5:23-29 '60.
(MIRA 13:7)

1. Ukrainskiy uglekhimicheskiy institut (for Virosuz, Voloshin).
2. Koksokhimstantsiya (for Lgalov).
(Coal—Carbonisation)

Sov/68-59-10-5/24

AUTHORS: Ginsburg, Ya.Ye., (deceased), Voloshin, A.I., and
Tikhomirov, Yu.L.

TITLE: The Importance of Moisture Content of Coal Charges for
the Carburisation Process

PERIODICAL: Koks i khimiya, 1959, Nr 10, pp 19-24 (USSR)

ABSTRACT: The influence of the moisture content of coal on the technological indices of coke oven operation and the quality of coke produced was investigated. The investigation was carried out on an underjet coke oven battery of 7 ovens with mean oven width of 407 mm and a height of 4300 mm. Two coking periods 14 and 15 hours were tested. During the experiments, the composition of the coal blend, its degree of crushing, and the coefficient of the excess air were kept constant. The quality of the coal blends and coking conditions - table 1. The dependence of the bulk density of the blend on its moisture content - fig 1, the dependence of the consumption of heat for coking on the moisture content of coal - fig 2 (curve 2);
Card 1/2 the dependence of temperature conditions in the tar

Sov/68-59-10-5/24

The Importance of Moisture Content of Coal Charges for the
Carburisation Process

line plane of the coke on the moisture content of coal - tables 2 and 3; the distribution of temperatures along the width of the charge during coking - fig 3; the dependence of the coke quality on the moisture content of coal - table 4. It was found that changes in the moisture content mainly affect the technological indices of coke oven operation. An increase in the moisture content of coal up to 10-11% noticeably affects the size distribution of coke (an increase in small sizes), but has little influence on the coke strength. There are 3 figures, 4 tables and 3 references, 1 of which is English and 2 German.

ASSOCIATION: UKhIN

Card 2/2

UOLOSHIN, A.I.

3(1) FRANK I BOOK INFORMATION 507/217
 Tekhnicheskoye predvideniye sbornik staty (by-product coking industry collection of articles) Moscow, Metallurgizdat, 1955. 260 p. 2,500 copies printed.

M.; I. S. Pilyugin; Ed. of Publishing House: A. A. Beryukov; Tech. Ed.: P. S. Tolst'yev

REMARKS: The book is intended for engineers and technicians in the by-product coking industry and in scientific research institutes. The book may also be used by students in secondary and higher technical schools.

CONTENTS: The articles in this collection on the by-product coking industry appeared originally either in the periodical *Ugol i Khimiya* (Coal and Chemistry) or in other publications during 1951-1955. The book discusses the development of new material reserves for coking, technology of the coking process, quality of coke and further enlargement of the number of chemical coking articles. The articles are devoted to a new procedure for preparing and beneficiating coke, methods for coking, and to the mechanization and automation of industrial processes. Numerous accompany individual articles.

GRUNTER, E. S., E. M. Lashov, and M. S. Pavlovskiy. [RUSSIAN] The Basic Principles for Preparation of Coals for Coking by Coking of Coking Coals in Heavy Mills. Identification 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

GRUNTER, E. S. [RUSSIAN] (Candidates of Technical Sciences, DOKTOR). Identification of Coking Coals in Heavy Mills. 176

VOLOSHIN, A.I.

Thermal constants of coal, semicoke and coke and the heat of coking.
Koks i khim. no.10:20-24 ' 58. (MIRA 11:11)
(Coke--Thermal properties) (Coal--Thermal properties)

AUTHOR: Voloshin, A.I.

SOV/68-58-10-7/25

TITLE: Thermal Constants for Coal, Semi-coke, Coke and the Heat of Carbonisation (Termicheskiye konstanty uglya, polukoksa, koksa i teplota koksovaniya)

PERIODICAL: Koks i Khimiya, 1958, Nr 10, pp 20 - 24 (USSR)

ABSTRACT: This is a survey of literature data on thermal conductivity and diffusivity of coals and carbonisation products as well as heat requirements for the carbonisation process. There are 13 references, including 9 Soviet and 4 German, and 5 Tables.

ASSOCIATION: UKhIN

Card 1/1

Voloshin, A.I.

VIROZUB, I.V., kand. tekhn. nauk; VOLOSHIN, A.I., kand. tekhn. nauk; SHVARTS,
S.A., kand. tekhn. nauk.

Improving the heating and operating of coke ovens. Koks i khim.
no.11:29-35 '57. (MIRA 10:12)

1. Khar'kovskiy nauchno-issledovatel'skiy uglekhimicheskiy institut.
(Coke ovens)

VIROZUB, I.V.; VOLOSHIN, A.I.; KAZMINA, V.V.; SHERMAN, M.Ya.

Regulating temperature in coke ovens. Koks i khim. no.1:17-24 '58.

(MIRA 11:2)

1. Ukrainskiy uglekhimicheskiy institut (for Kazmina). 2. Tsentral'-
naya laboratoriya avtomatiki (for Sherman).
(Coke ovens)

VOLOSHIN, A.I.,
AUTHORS: Virozub, I.V., Voloshin, A.I. and Shvarts, S.A., 68-11-6/11
Candidates of Technical Sciences.
TITLE: Improvement of Thermal and Technological Operating Conditions
of Coke Ovens (Sovershenstvovaniye teplovogo i tekhnolog-
icheskogo rezhimov koksovykh pechey)
PERIODICAL: Koks i Khimiya, 1957, No.11, pp. 29 - 35 (USSR)
ABSTRACT: Review in general terms of the improvements in coking
practice during the last 40 years.
There are 4 figures.
ASSOCIATION: UKhIN
AVAILABLE: Library of Congress
Card 1/1

VOLOSHIN, A. I.

68-1-5/22

AUTHORS: Virozub, I.V., Voloshin, A.I., Kezmina, V.V., and Sherman, M.Ya.

TITLE: The Control of Thermal Conditions of Coke Ovens (Regulirovaniye teplovogo rezhima koksovykh pechey)

PERIODICAL: Koks i Khimiya, 1958, No.1, pp. 17 - 24 (USSR)

ABSTRACT: Some relationships between various parameters affecting thermal conditions of coke ovens are discussed in order to indicate the basis for choosing some parameters as sources of impulses for the automatic control of the coke oven heating system. UKhIN and TsLA (Central Laboratory of Automation) proposed a system of automatic control of thermal conditions of coke ovens which secures a constant supply of heat and a constant excess of air coinciding at a constant temperature of air in the tunnel, with a constant suction at the top of the regenerators in the ascending stream. The proposed system is described in some detail (Figs. 1 and 2). It was installed on the No. 1 battery of the Zaporozhsk Coke Oven Works (Zaporozh.'ye koksokhimicheskiy zavod) and operated for about two years with satisfactory results. In addition to the described method of direct control of the supply of heat, three other indirect methods were installed and operated in the Soviet Union: 1) a scheme proposed by V.G. Mosyakov. The

Card1/5

The Control of Thermal Conditions of Coke Ovens.

68-1-5/22

control of gas supply is based on the stability of suction at the top of the gas regenerators on the ascending stream and that of the draught on the descending stream. The scheme was installed on the Zaporozhsk Coke Oven Works; its operation is described in Koks i Khimiya, 1958, No.1, pp. 25-29. 2) On the Magnitogorsk Metallurgical Combine (Magnitogorskiy Metallurgicheskiy Kombinat) an automatic control of heating coke ovens is in operation. This is based on the maintenance of a constant suction in the waste flues mains on both sides of the battery and a constant content of oxygen in the combustion products by varying the addition of coke oven gas (ovens are heated with a mixture of coke oven and blast furnace gas). The method is described in this issue, pp. 30-35. 3) On the Zhdanovsk Coke Oven Works (Zhdanovskiy koksokhimicheskiy zavod, the method of controlling the supply of air for combustion proposed by D.A. Amstislavskiy was based on the maintenance of constant suction at the top of the regenerators on the ascending stream. With this method, variations of the coefficient of excess air during the period between reverses are removed. The deficiency of the method is that air supply changes with changes in air temperature and a low accuracy of the control due to low suction

Card2/3

The Control of Thermal Conditions of Coke Ovens.

68-1-5/22

at the top of the regenerators. This method with some modifications was used for the above described TsLA-UKhIN method. In conclusion, the authors point out that further studies of the methods used is necessary in order to choose the best elements from each method for the development of a scheme for complete automation of heating coke ovens. There are 4 figures and 6 Slavic references.

ASSOCIATIONS: UKhIN and TsLA

AVAILABLE: Library of Congress

Card 3/3

VOLOSHIN, A.I., polkovnik, voyennoy letchik pervogo kalssa, Geroy
Sovetskogo Soyuza.

This is how the pilot gets ready to land. Vest.Vozd.Fl. no.
9:28-31 S'60. (MIRA 13:10)
(Airplanes--Landing)

ZASHKVARA, V.G.; VOLOSHIN, A.I.; MIROSHNICHENKO, A.M.

Tasks for the improvement of the quality of blast-furnace coke,
facing the coke and coal chemicals plants in the Ukraine. Koks i
khim. no.11:35-41 '63. (MIRA 16:12)

1. Ukrainskiy uglekhimicheskiy institut.

VOLOSHIN, A.I.; SKLYAR, M.G.; BOGOYAVLENSKIY, K.A.

Mechanical strength of coke and methods for its evaluation. Koks
i khim. no.9:29-33 '63. (MIRA 16:9)

1. Ukrainskiy uglekhimicheskiy institut.
(Coke—Testing)

VOLOSHIN, A.I.; VIROZUB, I.V.; KAZMINA, V.V.

Heat consumption in coking and ways for its reduction. Koks i khin.
no.10:20-24 '62. (MIRA 16:9)

1. Ukrainskiy uglekhimicheskiy institut.
(Coke ovens)

VOLOSHIN, A.I.; BOGOYAVLENSKIY, K.A.; AKHTYRCHENKO, A.M.; TURIK, I.A.;
ZHIDKO, A.S.; LYALYUK, V.S.; GABAY, L.I.; ONOPRIYENKO, V.P.;
STARSHINOV, B.N.; BABIY, A.A.; SAVELOV, N.I.; Prinizali
uchastiye: TORYANIK, E.I.; VASIL'YEV, Yu.S.; SHEMEL', T.I.;
SENYUTA, V.I.; BONDARENKO, I.P.; AMSTISLAVSKIY, D.M.;
ANDRIANOV, Ye.G.; SERGEYEV, G.N.; ZAMAKHOVSKIY, M.A.;
LYUKIMSON, M.O.; IVONIN, V.K.; TSIMBAL, G.I.; SEN'KO, G.Ye.;
KONAREVA, N.V.; SOLODKIY, Yu.L.; LUKASHOV, G.G.; TARASOV, D.A.;
GORBANEV, Ya.S.; SUPRUN, I.Ye.; TIKHOMIROV, Ye.I.; KONONENKO, P.A.;
PROKOPOV, V.N.; GULYGA, D.V.; PLISKANOVSKIY, S.T.; PONOMAREVA, K.Ye.

Effect of the length of coking on coke quality and the performance
of blast furnaces. Koks i khim. no.12:26-32 '61.

(MIRA 15:2)

1. Ukrainskiy uglekhimicheskiy institut (for Voloshin,
Bogoyavlenskiy, Akhtyrchenko, Turik, Zhidko, Lyalyuk, Toryanik,
Vasil'yev, Shemel'). 2. Zhdanovskiy koksokhimicheskiy zavod
(for Gabay, Senyuta, Bondarenko, Amstislavskiy, Andrianov,
Sergeyev, Zamakhovskiy, Lyukimson, Ivonin, Tsimbal). 3. Ural'skiy
nauchno-issledovatel'skiy institut chernykh metallov (for
Onopriyenko, Starshinov, Babi, Sen'ko, Konareva, Solodkiy).
4. Zavod "Azovstal'" (for Savelov, Lukashov, Tarasov, Gorbanev,
Suprun, Tikhomirov, Kononenko, Prokopov, Gulyga, Pliskanovskiy,
Ponomareva).

(Coke)

(Blast furnaces)

VOLOSHIN, A.I.; VIROZUB, I.V.; KAZMINA, V.V.; KURBATOVA, M.Yu.

Determination of the heat of carbonization under laboratory
conditions. Koks i khim. no.3:19-23 '62. (MIRA 15:3)

1. Ukrainskiy uglekhimicheskiy institut.
(Coal—Carbonization)

VOLOSHIN, A. M., jt. au.

Work on coordinating boring machines Moskva, Gos. nauchno-tekhn. izd-vo mashino-
stroit, 1 sudostroit. lit-ry, 1954. 142p. (54-42111)

TJ1260.C45

1. Drilling and boring. I. Voloshin, A. M., jt. au.

SKVARIK, V.P. [Skvaryk, V.P.], kand. tekhn. nauk; D'YACHENKO, V.S.; KUCHERENKO,
A.G. [Kucherenko, A.H.]; ~~VOLOSHIN, A.M.~~ [Voloshyn, A.M.]; IVANOV, A.O.

Use of plastics in shoe manufacture. Len. prom. no.3:78-81 JI-S '64.
(MIRA 17:10)

VOLOSHIN, A.M. (Krivoy Rog); KARPENKO, O.A. (Krivoy Rog)

Using short-delay blasting at the "Kommunar-Pobeda" mine of the
Dzerzhinskii Mining Administration. Mat. i gornorud. prom. no.3:
75-76 My-Je '63. (MIRA 17:1)

VOLOSHIN, A.M., inzh.; PANFILOV, I.D., tekhnik; USTIMENKO, A.A., tekhnik

Ventilating a mine section with the collector-drift in
the hanging wall of the ore body. Met. i gornorud. prom.
no.4:76-77 JI-Ag '63. (MIRA 16:11)

1. Rudnik im. Dzerzhinskogo, Krivoy Rog.

VOLOSHIN, A. M.

USSR/Miscellaneous - Solder

Card : 1/1

Authors : Voloshin, A. M.

Title : A new solder for mineral ceramic plates

Periodical : Stan i instr, 3, 37 - 38, Mar 1954

Abstract : A new type of solder that can be used for soldering mineral-ceramic tools used in metal-cutting. The new solder consists of: 57% red lead, 38% sand, and 5% zinc oxide.

Institution :

Submitted :

VOLOSHIN, A. M.

CHECHEVITSKIY, V.Ye.; VOLOSHIN, A.M.; VYDRIN, P.G., inzhener, retsenzent;
DUNAYEV, P.P., inzhener, redakter.

[Work on coordinated boring machines] Rabota na koordinatno-rastech-
nykh stankakh. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i
sudostroit. lit-ry, 1954. 142p. (MIRA 7:?)
(Drilling and boring machinery)

TIKHENKO, L.G., gornyy inzh.; STEL'MAKH, N.N., gornyy tekhnik; GUMENOK, G. Ye., gornyy tekhnik; VOLOSHIN, A.M., gornyy inzh.; BEREZOVSKIY, A.P., gornyy inzh.; LYUTYY A.L., gornyy inzh.; BUGAY, V.A., gornyy tekhnik-markshayder

"Improving underground work" by IA. D. Grossman and E. M. Kozakov.
Reviewed by L. G. Tikhenko and others. Gor. zhur. no.3:3-7 Mr '61.
(MIRA 14:3)

1. Rudoupravleniye im. Rozy Lyuksemburg, Krivoy Rog (for Tikhenko, Stel'makh, Gumenok). 2. Shakhta "Kommunar-Probeda", Krivoy Rog (for Voloshin, Berezovskiy, Lyutyy). 3. Shakhta "Novaya" rudoupravleniya im. Rozy Lyuksemburg (for Bugay).

(Mining industry and finance)
(Grossman, IA. D.) (Kozakov, E. M.)

VOLOSHIN, A.M.

New solder for mineral-ceramic lamina. Stan,1 instr. 25 no.3:
37-38 Mr '54. (MLRA 7:5)
(Solder and soldering) (Cutting tools)

VOLOSHIN, A. M.

*"Automobile Plant imeni Stalin - ZIS", Stanki I Instrument, 14, No. 4-5, 1943.

BR-52059019.

*Excerpts from his report:

KOSAR', A.V.; red.; VOLOSHIN, A.M., red.; GUREVICH, R.V., red.; KROPACHEV,
N.G., red.; PARENCHENKO, N.S., red.; PLEKHANOV, P.S., red.; SUSKOV,
I.A., red.; SHAROV, G.V., red.; OGAROV, A.P., tekhn.red.

[First in Siberian metallurgy] Pervenets Sibirskoi metallurgii.
Kemerovskoe knizhnoe izd-vo, 1957. 289 p. (MIRA 12:4)

1. Sekretar' partkoma Kuznetskogo kombinata (for Parenchenko).
2. Nachal'nik tekhnicheskogo otдела Kuznetskogo kombinata (for Sharov).
(Kuznetsk Basin--Metallurgical plants)

VOLOSHIN, A.P., tekhnik-mekhanik (poselok Dergachi Saratovskoy oblasti)

Device for assembling asbestos-cement pipes. Vod. i zan. tekhn.
no.1:34-35 Ja '66. (MIRA 19:1)

L 41770-65 EPF(c)/EPR/EWT(1)/EWT' /EWG(a)/EWP(b)/EWP(t) Pc-4/Pr-4/Pe-4 LP(c)/
 EPF PM7RN/W/ID
 ACCESSION NR: AP5005761 S/0170/65/008/001/0035/0040

AUTHOR: Kessel'man, P. M.; Kotlyarevskiy, P. A.; Voloshin, A. P.

TITLE: Equation of state and thermodynamic properties of molecular nitrogen

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 8, no. 1, 1965, 35-40

TOPIC TAGS: molecular nitrogen, equation of state, thermodynamic property, specific volume, entropy, enthalpy

ABSTRACT: In view of the increasing use of nitrogen in the heat-power, refrigeration, and chemical industry, the authors have derived, on the basis of experimental data on compressibility, the equation of state of molecular nitrogen using an earlier theoretical work by one of the authors (Kessel'man, IFZh, no. 1, 1960). They also present the results of calculations of the thermodynamic properties of nitrogen.

The authors have used a high-speed electronic computer. The article has 3 formulas and 1 table.

Card 1/2

L 41770-65

ACCESSION NR: AP5005761

ASSOCIATION: Tekhnologicheskii institut im. M. V. Lomonosova, Odessa (Technological Institute)

SUBMITTED: 15Apr64

ENCL: 00

SUB CODE: TD, MT

NR REF SOV: 002

OTHER: 011

Card 2/2

BURMIN, Yu.A.; VOLOSHIN, A.V.; MILETSKIY, B.Ye.

New genetic type of rare-metal deposits. Geol. rud. mestorozh. 7
no.1:75-81 Ja-F '65. (MIRA 18:4)

1. Gosudarstvennyy geologicheskly komitet Kazakhskoy SSR.

L 4912-66

ACC NR: AP5027035

oscilloscope whose sweep is triggered by the firing circuit of the laser pumping lamps. The bolometer, amplifier, and stabilized power supply are mounted in a sectioned metal container. Orig. art. has: 5 formulas and 7 figures. [04]

SUB CODE: EO/ SUBM DATE: 10Aug64/ ORIG REF: 004/ OTH REF: .006

ATD PRESS: 4135-

Card 2/2

L 32622-66 FBD/EWT(1)/EEC(k)-2/ETC(f)/I/EWP(k) IJP(c) WG/AT
 ACC NR: AP6015598 SOURCE CODE: UR/0368/66/004/005/0458/0459
 AUTHOR: Besshaposhnikov, A. A.; Voloshin, A. Ye.; Kuchuberiya, I. Kh.; Simonova, N.V.
 ORG: none
 TITLE: Measurement of electron temperature of a plasma by means of scattered laser radiation
 SOURCE: Zhurnal prikladnoy spektroskopii, v. 4, no. 5, 1966, 458-459
 TOPIC TAGS: laser application, plasma electron, electron temperature, LASER RADIATION, LASER BEAM
 ABSTRACT: The authors used a laser beam to measure the electron temperature in a setup in which the plasma was produced by a rotating high-frequency dipole at 2.45 Mc in a quasistationary field of mirror configuration. The vacuum chamber was a glass tube 50 mm in dia. and 1000 mm long (Fig. 1). The spectrum of the plotted radiation was measured point by point and the electron temperature was calculated from the smoothed spectrum and found to be $T_e \approx 4$ ev. From the presence of a shift in the scattered radiation relative to the incident radiation it is deduced that the electrons move axially with velocity $\sim 10^8$ cm/sec. The reason for this phenomenon, and also the details of the fine structure of the scattered radiation, are still unclear. The authors thank R. A. Demirkhanov for suggesting the investigation and for continuous interest. Orig. art. has: 2 figures.

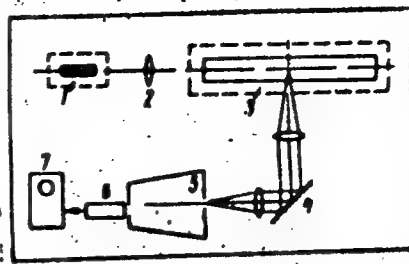
Cord 1/2

UDC: 533.9.07

L 32622-66

ACC NR: AP6015598

Fig. 1. Block diagram of the measurement apparatus. 1 - Ruby laser, 2 - lens, 3 - vacuum chamber, 4 - optical focusing system, 5 - spectrograph, 6 - photomultiplier, 7 - oscilloscope.



SUB CODE: 20/ SUBM DATE: 12Jul65/ OTH REF: 004

Card 2/2 50

VOLOSHIN, B.

By student efforts. Prof.-tekh. obr. 20 no.4:14 Ap '63.
(MIRA 16:5)

1. Direktor professional'no-tekhnicheskogo uchilishcha No.7,
g.Novorossiysk.

(Building trades—Study and teaching)

KRUPHOVA, Galina Fedorovna; KRIVONOSOV, I.M., kandidat tekhnicheskikh nauk,
nauchnyy redaktor; VOLOSHIN, D.A., redaktor

[Draining and reclaiming swampy land; a bibliography] Osushenie i
osvoenie zabolochennykh zemel'; rekomendatel'nyi ukazatel' litera-
tury. Nauchnyi red. I.M.Krivososov. Leningrad, Gos. publichnaya
biblioteka im. M.E.Saltykova-Shchedrina, 1957. 31 p. (MIRA 10:2)
(Bibliography--Drainage)

GAIUNSKAYA, Viktoriya Andreyevna; VOLOSHIN, D.A., redaktor

[For the expansion of fruit culture in the northwestern zone; a
bibliography] Za rasshirenie sadovodstva v severo-zapadnoi zone;
rekomendatel'nyi spisok literatury. Leningrad, 1957. 20 p.
(Bibliography—Fruit culture) (MLRA 10:3)

VOLOSHIN, D.A.

GRANSKIY, Viktor Isiderovich; VOLOSHIN, D.A., redaktor; MERKULOV, V.P.,
nauchnyy redaktor.

[What an electrician should read; a bibliography] Chto chitat' elektromonteru; rekomendatel'nyi ukazatel' literatury. Nauchnyi red. V.P. Merkulov. Leningrad, Gos. publichnaya biblioteka im. M.E. Saltykova-Shchedrina, 1957. 87 p.

(MLRA 10:4)

(Bibliography--Electric engineering)

KRUPNOVA, Galina Fedorovna; VOLOSHIN, D.A., red.; TOLOCHINSKAYA, B.M.,
bibliogr.red.

[Guide to agricultural reference books] Putevoditel' po sel'sko-
khoziaistvennym sprevochnikam. Leningrad, Gos. publichnaya
biblioteka, 1958. 123 p. (MIRA 12:9)
(Bibliography--Agriculture)

GNUCHEVA, Vera Vladimirovna; VOLOSHIN, D.A., red.; TOLOCHINSKAYA, B.M.,
bibliograf.red.

[Guide to medical reference books] Putevoditel' po meditsinskim
spravochnikam. Leningrad, Gos.Ordena trudovogo krasnogo znameni
publichnaya biblioteka im. M.E.Saltykova-Shchedrina, 1959. 110 p.
(MIRA 12:12)

(BIBLIOGRAPHY--MEDICINE)

GRAN'SKIY, Viktor Isidorovich; KOMAROV, V.B., prof., doktor tekhn.nauk, retsenzent; POZIN, M.Ye., prof., doktor khim.nauk, retsenzent; TUMAROV, A.S., prof., doktor tekhn.nauk, retsenzent; KARPOV, V.G., dotsent, kand.tekhn.nauk, retsenzent; BLYUMBERG, V.A., kand.tekhn.nauk, retsenzent; BESPALOV, I.V., inzh., retsenzent; RIVLIN, L.B., inzh., retsenzent; ANSEROV, M.A., kand.tekhn.nauk, obshchiy red.; VOLOSHIN, D.A., red.; TOLOCHINSKAYA, B.M., bibliogr.red.

[Guide to technical reference books] Putevoditel' po tekhnicheskim spravochnikam. Pod obshchei red. M.A.Ansanova. Leningrad, Gos. publichnaya biblioteka im. M.E.Saltykova-Shchedrina, 1958. 334 p.
(MIRA 12:8)

(Bibliography--Technology)

GNUCHEVA, Vera Vladimirovna; VOLOSHIN, D.A., red.

[Bibliography of Soviet medical bibliography, 1917-1957]
Bibliografiia sovetskoi meditsinskoi bibliografii, 1917-1957 gg.
Pod red. D.A. Voloshina. Leningrad, 1953. 118 p. (MIRA 12:2)
(BIBLIOGRAPHY--MEDICINE)

KRUPNOVA, Galina Fedorovna, ; VOLOSHIN, D.A., red.; TOLOCHINSKAYA, B.M.,
bibliograficheskiy red.

[Guide to agricultural manuals] Putevoditel' po sel'skokhoziaistvenny
spravochnikam. Leningrad, Gos. publichnaya biblioteka im. M.E.
Saltykova-Shchedrina, 1958. 123 p. (MIRA 11:11)
(Bibliography--Agriculture)

VOLOSHIN, D. A.

STEPANOVA, V.K.; VOLOSHIN, D.A., red.

[The International Geophysical Year; a bibliography] *Mezhdunarodnyi
gnofizicheskii god; rekomendatel'nyi spisok literatury. Leningrad,
Gos. publ.biblioteka im. M.N.Saltykova-Shchedrina, 1957. 25 p.*

(MIRA 11:2)

(Bibliography-- International Geophysical Year)

VOLOSHIN, D.A.

GENDEL'MAN, Yeva Isayevna; SOMINSKIY, V.S., nauchnyy redaktor; VOLOSHIN,
D.A., red.; TOLOCHINSKAYA, B.M., bibliograficheskiy red.

[Technical progress in the U.S.S.R.; a bibliography] Tekhnicheskiy
progress v SSSR; rekomendatel'nyi ukazatel' literatury. Pod nauchnoi
red. V.S.Sominskogo. Leningrad, Gos. publichnaya biblioteka im. M.E.
Saltykova-Shchedrina, 1958. 177 p. (MIRA 11:2)
(Bibliography--Technology)

VOLOSHIN, D. DA.

ZIL'HERMINTS, Lyudmila Veniaminovna; KAMNEV, P.V., nauchnyy red.; VOLOSHIN, D.A. red.

[What the worker engaged in forging and pressing operations should read; a bibliography] Chto chitat' rabochim kuznechno-shtampovochnogo proizvodstva; rekomendatel'nyi ukazatel' literatury. Pod nauchnoi red. P.V.Kamneva. Leningrad, Gos.publichnaya biblioteka im.M.E.Saltykova-Shchedrina, 1957. 74 p.

(MIRA 10:12)

(Bibliography--Forging)

VOLOSHIN, D.A.

GRANSKIY, Viktor Isidorovich; ANSEROV, M.A., kand.tekhn.nauk, nauchnyy
redaktor; VOLOSHIN, D.A., redaktor.

[What the milling machine operator should read to improve his
qualifications; a bibliography] Chto chitat' frezerovshchiku dlia
povysheniia kvalifikatsii; rekomendatel'nyi ukazatel' literatury.
Nauchnyi red.M.A.Ansarov. Leningrad, Gos.publichnaia biblioteka
im. M.E.Saltykova-Shohedrina, 1957. 43 p. (MIRA 10:11)
(Bibliography--Metal cutting)

VOLOSHIN, D. A.

GRANSKIY, Viktor Isidorovich; BEREZIN, B.P., nauchnyy redaktor; VOLOSHIN,
D.A. ~~redaktor~~

[What the foundry worker should read; a bibliography] Chto chitat'
rabochim liteinogo proizvodstva; rekomendatel'nyi ukazatel' literatury.
Nauchnyi red. B.P.Berezin. Leningrad, Gos. publichnaya biblioteka
im. M.E.Saltykova-Shchedrina, 1957. 95 p. (MLA 10:10)
(Bibliography--Founding)

GNUCHOVA, V.V.; VOLOSHIN, D.A., redaktor

[Guide to foreign bibliographies of medical literature (1945-1956)]
Putevoditel' po inostrannoii bibliografii meditsinskoi literatury
(1945-1956 gg.). Pod red. D.A.Voloshina. Leningrad, Gos. publichnaya
biblioteka im. M.E.Saltykova-Shchedrin, 1957. 108 p. (MLBA 10:7)
(BIBLIOGRAPHY--MEDICINE)

Voloshin, D.A.

LENINGRAD. Publichnaia biblioteka.

An aid for those who are studying V.R. Vil'iams book, "The principles of agriculture".
Sostavlen D.A. Voloshinym, pod red. A.G. Trutneva. Leningrad, 1950. 37 p.
(51-36003)

8591.V59L4

VOLOSHIN, D.K.

Operating a tailings disposal department in one of the northern
ore dressing plants. Trudy Mekhanobr. no.93:113-121 '56. (MIRA 11:6)

(Ore dressing--Equipment and supplies) (Waste products)

VOLOSHIN, E. S.

The best highly productive maize varieties.

"Zemledolie" No. 7, 1954.

VOLOSHIN, F.

"Eisenhower Doctrine" is a creation of American monopolies.
Blok.agit.vod.transp. no.8:36-44 Ap '57. (MLRA 10:5)
(United States--Foreign Relations--Near East)
(Near East--Foreign Relations--United States)

VOLOSHIN, G.; KUZNETSOV, L.V.; PASHCHENKO, V.Z. (Tashkent)

Questions and answers. Zashch. rast. ot vred. i bol. 6 no.7:42
Jl '61. (MIRA 16:5)

1. Nachal'nik Upravleniya po zashchite rasteniy Ministerstva sel'skogo
khozyaystva UkrSSR (for Voloshin). 2. Biologo-pochvennyy fakul'tet
Moskovskogo gosudarstvennogo universiteta (for Kuznetsov).
(Plants, Protection of)